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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,564	06/14/2006	Fujihiko Tomita	90606.87/ok	2014
54/071 7590 10/06/2008 YAMAHA HATSUDOKI KABUSHIKI KAISHA C/O KEATING & BENNETT, LLP 1800 Alexander Bell Drive SUITE 200 Reston, VA 20191				
EXAMINER				
HENKEL, DANIELLE B				
ART UNIT		PAPER NUMBER		
1797				
NOTIFICATION DATE		DELIVERY MODE		
10/06/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JKEATING@KBIPLAW.COM  
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### Office Action Summary

**Application No.**

10/564,564

**Applicant(s)**

TOMITA ET AL.

**Examiner**

DANIELLE HENKEL

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 September 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-36 is/are pending in the application.  
4a) Of the above claim(s) 28, 29 and 32-36 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 17-27, 30-31 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SF-08)  
Paper No(s)/Mail Date 1/13/06  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Summary***

1. This is the initial Office action on the 10/564564 application filed on June 14, 2006.

### ***Election/Restrictions***

2. Applicant's election without traverse of claims 17-27, 30, and 31 in the reply filed on September 4, 2008 is acknowledged.
3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 17, 23, 30 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by YOSHISHIGE (JP 06-153902).

- a. With respect to claim 17, YOSHISHIGE teaches a device for culturing microorganisms with a culture medium in a culture bag (container) with the

culture tank held by a supporter material (Paragraphs 0001, 0004).

YOSHISHIGE teaches the culture bag is flexible and in a folded state during storage but it hangs inside the supporter material when in use (Paragraph 0006). Therefore the usable cultivation tank shape of the bag is due to being supported by the supporter material.

b. With respect to claim 23, YOSHISHIGE teaches a gas introduction pipe inserted through the lid of the culture bag (Paragraph 0006).

c. With respect to claim 30, YOSHISHIGE teaches a gas introduction pipe (substantially circular) that is porous and the culture bag has an opening in only one position which provides access to the inside of the bag (Paragraph 0006). A tube extends through the opening of the culture bag of YOSHISHIGE with one end connected to the gas introduction pipe and the other end exterior to the bag to allow the supply of gas (Paragraph 0004 and Drawing 1).

d. With respect to claim 31, YOSHISHIGE teaches the culture tank is a flexible bag shown to have longer and shorter sides (substantially rectangular) with the open portion at one of the shorter sides having a through hole (shaft passage member) which one end of the gas introduction tube extends outward through with the remainder of the tube (shaft passage member) descending along the long side of the bag (Drawing 1).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over YOSHISHIGE (JP 06-153902), and further in view of TOSHI (JP 2000-139444).

a. With respect to claim 18, YOSHISHIGE teaches the culture bag (container) is transparent (Paragraph 0006), but does not explicitly disclose the support having a bottom and side plates. However, TOSHI teaches a culturing apparatus that has a pair of transparent plates supported by the lower manifold (bottom) of a frame-like supporter material (Paragraph 0027). As both the culture container of YOSHISHIGE and the side plates of TOSHI are transparent the transparent portions of both will overlap. At the time of the invention it would have

been obvious to one of ordinary skill in the art to modify the apparatus of YOSHISHIGE with the support of TOSHI having the side plates and bottom because it allows for the creation of a culture space that can be sealed with the sides mutually supported and the transparency allows for light to penetrate allowing the culture to grow (Paragraphs 0006-0007).

b. With respect to claim 19, TOSHI teaches the plates are parallel with a culture space between (oppose each other) (Paragraph 0027). Drawing 6 also further depicts the plates as flat and opposing.

c. With respect to claim 20, TOSHI teaches side plates attached to a manifold of frame-like supporter material at the top and bottom portions of the plates using a nut and bolt screw system (removably fixed) (Paragraphs 0027 and 0028) because it allows for easy assembly and removal of the apparatus (0019).

9. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over YOSHISHIGE (JP 06-153902) in view of TOSHI (JP 2000-139444) as applied to claims 18-20 above, and further in view of FOX (US 6942775).

a. With respect to claim 21, the combination of YOSHISHIGE and TOSHI teaches the culturing apparatus of claim 20, but does not explicitly disclose posts and pressing members. However, FOX teaches a frame assembly with a platform style base having vertical members (posts) extending to a cover of the frame. FOX also teaches clamps (pressing members) attached along the members to hold a plate against the frame (Column 5, lines 20-55). At the time of

the invention it would have been obvious to one of ordinary skill in the art to modify the frame of YOSHISHIGE and TOSHI to include the posts and pressing members as taught by FOX because it allows for the plates to be removably held in place for ease of setup and use as with the device of YOSHISHIGE as modified by TOSHI.

b. With respect to claim 22, YOSHISHIGE in view of TOSHI teaches the culture units are arranged end to end with plates sharing a mutual frame (Paragraph 0027), but the combination of YOSHISHIGE and TOSHI does not explicitly disclose the plates interconnected through the posts. However, FOX teaches the vertical posts with clamps as pressing members. It would have been obvious to one of ordinary skill in the art to combine the culturing modules sharing a mutual frame YOSHISHIGE and TOSHI to include the clamp fixing the plates to a post as taught by FOX because the clamping mechanism allows for ease in manufacturing and set up of the removably fixed plates.

10. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over YOSHISHIGE (JP 06-153902) in view of TOSHI (JP 2000-139444) as applied to claims 18-20 above, and further in view of WATERHOUSE (US 6005663).

a. With respect to claim 24, the combination of YOSHISHIGE and TOSHI does not explicitly disclose the side plates supported for rotation about the bottom ends. However, WATERHOUSE teaches a chamber in which the front side forms an access door which is hinged at the bottom (supported for rotation) to allow release from the frame of the chamber (Column 9, lines 22-27). At the

time of the invention, it would have been obvious to one of ordinary skill in the art to modify the culture apparatus of YOSHISHIGE and TOSHI to include the plates being able to rotate open as taught by WATERHOUSE because it permits movement from a closed position to an open position to allow access to the chamber (Column 9, lines 22-27).

b. With respect to claim 25, the combination of YOSHISHIGE, TOSHI, and WATERHOUSE teaches the claimed invention except for the wires connecting the plates to the framework. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the wires as using wires to allow a rotation range of the plates is equivalent to using a hinge to allow the plates to rotate as in WATERHOUSE. (MPEP 2144.06)

c. With respect to claim 26, WATERHOUSE teaches the hinged panel has a rotation range from closed to opened until the panel contacts the bottom of the frame where it is stopped (Figure 9A).

d. With respect to claim 27, WATERHOUSE teaches the panel rotates from a closed position (attachment) to an open position (released) in which the top of the panel is rotated clear of the top of the device allowing an access space between the frame of the device and the panel (Column 9, lines 22-27, Figure 9A).



***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIELLE HENKEL whose telephone number is (571)270-5505. The examiner can normally be reached on Mon-Thur: 7:30am-5pm, Alternate Fridays: 7:30am-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DBH

/Jill Warden/  
Supervisory Patent Examiner, Art Unit 1797